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Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application

Claims 1-8     (*canceled*)

9.     (*New*) Method of translating input data into at least one lexical output sequence including a step of decoding the input data so (a) sub-lexical entities represented by the said data are identified by using a first model determined by predetermined sub-lexical entities, and (b) various possible combinations of the sub-lexical entities are generated, as the sub-lexical entities are identified and with reference to at least one second model constructed on the basis of lexical entities, each combination being intended to be stored, conjointly with an associated likelihood value, in a storage arrangement having plural memory areas able to store at least one of the said combinations, each area having an address equal to a value taken by a predetermined scalar function as a result of said function being applied to parameters peculiar to sub-lexical entities and to their combination intended to be stored together in the area in question.

10.    (*New*) Translation method according to Claim 9, in which the predetermined scalar function is of an injective nature.

11.    (*New*) Translation method according to Claim 10, in which the predetermined scalar function is also of a surjective nature.

12.    (*New*) Translation method according to Claim 11, in which the sub-lexical model includes models of sub-lexical entities, different states of which are numbered contiguously and have a total number less than or equal to a first predetermined number peculiar to the sub-lexical model, and in which the articulation model includes models of possible combinations of sub lexical entities, different states of which are numbered contiguously and have a total number less than or equal to a second predetermined number peculiar to the articulation model, the numbers of the states of the sub-lexical entities and their possible combinations being the parameters to which the predetermined scalar function is intended to be applied.

13.    (*New*) Translation method according to Claim 12, in which each value taken by the predetermined scalar function is a concatenation of the remainder of a first integer division by

the first predetermined number of the number of a state of a sub-lexical entity identified by the first model and a remainder of the second integer division by the second predetermined number of the number of a state of a combination identified by the second model.

14. *(New)* Translation method according to claim 13, wherein the decoding step uses a Viterbi algorithm applied conjointly with a first Markov model having states representing various possible modellings of each sub-lexical entity enabled in a given translation language, and to a second Markov model having states representing various possible modellings of each articulation between two sub-lexical entities enabled in the said translation language.

15. *(New)* Translation method according to claim 9, wherein the decoding step uses a Viterbi algorithm applied conjointly with a first Markov model having states representing various possible modellings of each sub-lexical entity enabled in a given translation language, and to a second Markov model having states representing various possible modellings of each articulation between two sub-lexical entities enabled in the said translation language.

16. *(New)* Speech recognition system for performing a translation method according to claim 9.

17. *(New)* Speech recognition system for performing a translation method according to claim 10.

18. *(New)* Speech recognition system for performing a translation method according to claim 11.

19. *(New)* Speech recognition system for performing a translation method according to claim 12.

20. *(New)* Speech recognition system for performing a translation method according to claim 13.

21. *(New)* Speech recognition system for performing a translation method according to claim 14.

22. *(New)* Speech recognition system for performing a translation method according to claim 15.

23. *(New)* Method of translating input data into a lexical output sequence, including a step of decoding the input data intended to be executed by a Viterbi algorithm, simultaneously using a plurality of distinct knowledge sources forming a single transducer whose states are intended to be stored conjointly with an associated likelihood value, in a storage arrangement having memory areas, each of the memory areas being able to store at least one the said states, each area having an address equal to a value taken by a predetermined scalar function as a result of said function being applied to parameters peculiar to the states of said single transducer.

24. *(New)* Speech recognition system for performing a translation method according to claim 23.

25. *(New)* The method of claim 23 further including storing the states of the single transducer conjointly with the associated likelihood value in the storage arrangement having the memory areas.

26. *(New)* Method of translating input data into at least one lexical output sequence including the steps of decoding the input data so (a) sub-lexical entities represented by the said data are identified by using a first model determined by predetermined sub-lexical entities, and (b) various possible combinations of the sub-lexical entities are generated, as the sub-lexical entities are identified and with reference to at least one second model constructed on the basis of lexical entities: storing each combination conjointly with an associated likelihood value, in a storage arrangement having plural memory areas able to store at least one of the said combinations, each area having an address equal to a value taken by a predetermined scalar function as a result of said function being applied to parameters peculiar to sub-lexical entities and to their combination that is conjointly stored in the area.